

ILLINOIS POLLUTION CONTROL BOARD
August 10, 1988

SCOTT AIR FORCE BASE,)
)
 Petitioner,)
)
 v.) PCB 88-69
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.

OPINION AND ORDER OF THE BOARD (by J.D. Dumelle):

This matter comes before the Board upon an April 14, 1988, petition for variance filed by the Department of the Air Force, Scott Air Force Base, in St. Clair County, Illinois. Scott Air Force Base (Scott) requests variance for its wastewater treatment plant, operating under NPDES permit No. IL0026859 during the rehabilitation of Scott's wastewater treatment plant. Specifically, Scott's petition requests variance from 35 Ill. Adm. Code 304.120(c), 304.121, and 304.124. As hearing was waived, no hearing has been held. On July 25, 1988 the Agency filed a Motion For Leave To File Instantly Its Recommendation, recommending that the variance be granted subject to certain conditions. The Agency's motion to file is granted. For the reasons set forth below, the Board grants the requested variance, subject to certain conditions.

As a preliminary matter, the Board notes that Scott's petition requested variance from 35 Ill. Adm. Code 304.120, 304.121, and 304.124. The Agency's recommendation states that the variance is requested from 35 Ill. Adm. Code 304.120(c), 304.121 and 304.141(a). Sections 304.120(c) and 304.121 refer to BOD₅, suspended solids, and fecal coliform. Section 304.124 sets additional standards for various contaminants. Section 304.141 prohibits discharges in excess of standards and limitations set forth in an NPDES Permit. As Scott's petition requests variance relief only for BOD₅, suspended solids, and fecal coliform, and because Scott operates under NPDES permit, the Board believes that the Agency has correctly characterized the variance request and that Scott's petition inadvertently requested variance from Section 304.124 when it intended variance from Section 304.141(a). This variance therefore relates to Section 304.141(a), not Section 304.124.

Scott is a federal air force base (Department of Defense) which is the headquarters of the 375 Air Base Group (MAC) in St. Clair County. The Base has a population of 7,880, with occasional use of base facilities by an additional 11,422

people. The wastewater treatment system consists of a collection system first constructed in 1919, a treatment plant consisting of 4 primary clarifiers, 2 trickling filters (one of which has been repaired under PCB 87-48), 3 final clarifiers, 2 anaerobic digesters, sludge drying beds and disinfection constructed in 1940, and final sand filters constructed in 1972. Scott has conducted programs to reduce inflow and infiltration into the collection system and to maintain the plant equipment. As anticipated in the prior variance, Scott is now proposing to rehabilitate the remainder of its plant.

Discharge of the plant effluent is to Silver Creek, a tributary of the Kaskaskia River.

Scott has been granted a construction permit subject to this variance on June 30, 1988 for the anticipated construction consisting of: Inlet works including wet well, grit chamber, and bar screen; 3-32 ft. x 48 ft. x 10 ft. SWD rectangular primary clarifiers; effluent water tank; in-plant service water system; sludge dewatering building; administration building; and miscellaneous related work. The construction also includes rehabilitation of one trickling filter, three final clarifiers, one anaerobic digester, one sludge drying bed, and miscellaneous related work.

The Agency caused notice of this variance request to be published and sent to the parties required to be notified by Section 37 of the Act. No comments have been received. The Agency has investigated its files of Petitioner's NPDES Permit, Discharge Monitoring Reports and other correspondence.

PERMIT STATUS

Petitioner discharges its wastes under NPDES Permit IL0026859. This permit establishes final effluent limits of:

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l	
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.
Total Flow, mgd	1.8			
BODs	155	417	10	20
TSS	186	500	12	24

ENVIRONMENTAL IMPACT

Petitioner has reported the following information concerning its effluent BOD and TSS levels on its Discharge Monitoring Reports (DMR's):

Month	Average Flow (MGD)	Effluent BOD (mg/l)		Effluent TSS (mg/l)		Fecal Coliform
		Monthly Average Load	Monthly Average Concentration	Monthly Average Load	Monthly Average Concentration	Daily Max. 100/ml
04/88	1.510	146	12	77	6	TNOC
03/88	2.5 MGD	634	28	958	42	TNOC
03/88	1.6 2.4 MGD	48	4	50	3	TNOC
02/88	1.758	129	12	91	7	TNOC
01/88	2.144	117	9	71	5	TNOC
12/87	2.559	285	13	297	13	TNOC
11/87	1.398	111	11	96	9	3500
10/87	1.217	50	6	60	7	1100
09/87	1.302	36	4	54	6	300
08/87	1.416	45	4	74	7	1400
07/87	1.741	41	4	64	8	100
06/87	1.339	40	5	24	3	0
05/87	1.227	41	5	20	2	100
04/87	<u>1.442</u>	<u>67</u>	<u>6</u>	<u>54</u>	<u>4</u>	<u>100</u>
Average	1.721	96	8	86	7	
NPDES Permit Limits		155	10	186	12	400
Variance Limits		185	20	210	20	

Note: TNOC means "too numerous to count."

The Agency states that it has no reason to believe that the lesser quality effluent Scott plans to discharge will have a significant adverse impact on the receiving stream because the slight increase in concentration will only occur during wet weather (when it rains) and consequently high stream flows.

COMPLIANCE PLAN

Scott plans to upgrade the trickling filter by December 31, 1989 as its compliance plan. Due to the plant's age and structural condition, the Agency is unaware of any other feasible compliance or compliance alternative available. The Agency states that the length of time, approximately 546 days, appears to be reasonable.

CONSISTENCY WITH FEDERAL REGULATIONS

Scott alleges that the Board can grant the requested variance consistent with federal law. The Agency agrees stating that Scott is not subject to the July 1, 1988 compliance deadline for secondary treatment for POTW's because it is not a POTW. It must meet Best Practicable Control Technology (BPT) currently available under Section 301(b)(1)(A) of the Clean Water Act (CWA) by July 1, 1977 for which there are no specific federal

regulations. The Board notes that although 35 Ill. Adm. Code 301.365 defines "Publicly Owned Treatment Works (POTW)" as "a treatment works owned by a municipality, sanitary district, county or state or federal agency . . .," 40 CFR 122.2 defines POTW as a treatment works owned by a State or Municipality. Because the federal regulations do not include in the definition of POTW treatment works owned by a federal agency, the Board agrees that the July 1, 1988 deadline does not apply. Therefore, the grant of this variance is not inconsistent with federal law.

HARDSHIP

The Agency states that Scott's hardship is not a matter of limited resources but rather a question of feasibility. Scott has allocated sufficient funds necessary to successfully upgrade its facilities. The provision of duplicate treatment units as in this case was designed for periodic shut down and maintenance of one unit during low flow periods.

CONCLUSION

The Agency states the present plant at Scott's facility has demonstrated compliance with its permit at low flow conditions using only one effective trickling filter. Notwithstanding its inflow reduction efforts, Scott can predict that with increased rainfall, flow to the plant will increase beyond the treatment capacity of one trickling filter. The media in the other filter needs to be replaced and other than temporary construction of a entirely new unit or holding basin there appears to be no feasible alternative. The construction schedule appears to be reasonable and longer than that provided by provisional variances. Any inadequately treated sewage will be discharged at a time when the receiving stream is also at high flow which will mitigate any adverse effect on the waters of the State. The load limits should also be increased for high flows to allow for scouring of the collection sewers during rainfall.

The Agency therefore recommends that variance from 35 Ill. Adm. Code 304.120, 304.121 and 304.141(a) be granted subject to the conditions set forth below. Also, the Agency recommendation includes variance from BOD and TSS quantity limits (see B(1)(b) and (d) below). These limits are apparently set forth in Scott's NPDES Permit. The Board notes that it does not grant variances from individual NPDES permit limitations as they are not Board regulations. Moreover, the Board believes that this language is surplusage in that the Board today grants variance from 35 Ill. Adm. Code 304.141(a). However, the Board retains the BOD and TSS quantity limits as part of the variance order for any administrative purpose it may serve.

The Board hereby grants the variance as recommended. This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The Scott Air Force Base is hereby granted variance from the effluent standards of 35 Ill. Adm. Code 304.120(c), 304.121, and 304.141(a) for its wastewater treatment plant in St. Clair County, Illinois subject to the following conditions:

- A. Variance shall commence on July 1, 1988, or upon start of construction of the inlet works, and expire on December 31, 1989 or upon completion of construction, whichever occurs first.
- B. Scott Air Force Base shall meet the following effluent limits during the term of the Variance.
 1. When daily and/or monthly average flows are greater than 2.0 MGD.
 - a. BOD concentration = 20 mg/l monthly average and 30 mg/l.
 - b. BOD quantity = 215 lbs/d monthly average and 600 lbs/d daily maximum.
 - c. TSS concentration = 20 mg/l monthly average and 35 mg/l daily maximum.
 - d. TSS quantity = 350 lbs/d monthly average and 650 lbs/d daily maximum
 2. When daily and/or monthly average flows are less than or equal to 2.0 MGD, Scott Air Force Base shall meet the limits in its NPDES permit.
- C. All flows in excess of 2.0 MGD, at the minimum, shall receive primary treatment and chlorination.
- D. Scott Air Force Base shall sample its effluent each day when flows exceed 2.0 MGD. The effluent samples shall be analyzed for parameters listed in Scott Air Force Base's NPDES permit.
- E. Scott Air Force Base shall summarize all samples taken and submit them, along with plant flow data, with its monthly Discharge Monitoring Report (DMR).
- F. Scott Air Force Base shall report to the Agency's Collinsville Regional Office by telephone when repair work is beginning and completed. A written confirmation of the notification shall be sent to the following address within five (5) days:

Illinois Environmental Protection agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Post Office Box 19276
Springfield, IL 62794-9276

- G. Scott Air Force Base shall execute and submit a Certificate of Acceptance to the address show above within forty-five (45) days.

This variance shall be void if Petitioner fails to execute and forward the certificate within the forty-five day period. The forty-five day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

CERTIFICATION

I, (We), Scott Air Force Base, having read the Order of the Illinois Pollution Control Board, in PCB 88-69, dated August 10, 1988, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

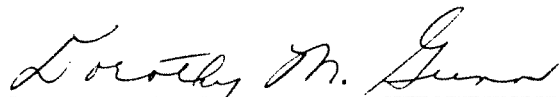
Title

Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985 ch. 111 1/2 par. 1041, provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 10th day of August, 1988 by a vote of 5-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board